Serial No. 10/594,529 Docket No. SH-0069PCTUS RYU.034

AMENDMENTS TO THE CLAIMS

Please cancel claims 1, 8, 10, and 13 without prejudice or disclaimer, add new claims 19-24, and amend the claims as follows:

- 1. (Cancelled.)
- 2. (Currently Amended) The manufacturing apparatus according to claim 1, A manufacturing apparatus of a porous glass base material for depositing glass particles produced by subjecting a material gas to flame hydrolysis, onto a starting member placed vertically.

wherein a plurality of gas inlets is provided in one or more lateral walls of a process chamber including a burner for the deposition therein.

wherein two or more of the plurality of gas inlets are provided both in upper portions of the one or more lateral walls and along a ceiling of the process chamber, and

wherein at least one of the two or more of the plurality of gas inlets [[are]] is provided in a first lateral [[walls]] wall and at least one of the two or more gas inlets is provided in a second lateral wall that oppose each other opposes the first lateral wall with a porous glass base material being positioned therebetween.

- 3. (Currently Amended) The manufacturing apparatus according to claim [[1]] 2, wherein slit-like gas inlets are provided in the process chamber, along left and right edges of a lateral wall on which the burner is provided.
- 4. (Currently Amended) The manufacturing apparatus according to claim [[1]] 2, wherein an exhaust outlet is provided in a lateral wall that opposes a lateral wall on which the burner is provided.
- 5. (Original) The manufacturing apparatus according to claim 4, wherein a width of the lateral wall in which the exhaust outlet is provided is smaller than a width of a lateral wall in which a gas inlet is provided.

Serial No. 10/594,529 Docket No. SH-0069PCTUS

RYU.034

6. (Currently Amended) The manufacturing apparatus according to claim [[1]] 2, wherein one of the gas inlets is provided in a lateral wall in which an exhaust outlet is provided, and a distance between a lowest part of the gas inlet and a highest part of the exhaust outlet is 30 mm or more.

3

7. (Currently Amended) The manufacturing apparatus according to claim [[1]] 2, wherein the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows have flat surfaces.

8. (Cancelled.)

9. (Original) The manufacturing apparatus according to claim 3, wherein an exhaust outlet is provided in a lateral wall that opposes the lateral wall on which the burner is provided.

10. (Cancelled.)

11. (Previously Presented) The manufacturing apparatus according to claim 3, wherein one of the gas inlets is provided in a lateral wall in which an exhaust outlet is provided, and a distance between a lowest part of the gas inlet and a highest part of the exhaust outlet is 30 mm or more.

12. (Original) The manufacturing apparatus according to claim 4, wherein one of the gas inlets is provided in the lateral wall in which the exhaust outlet is provided, and a distance between a lowest part of the gas inlet and a highest part of the exhaust outlet is 30 mm or more.

13. (Cancelled.)

14. (Previously Presented) The manufacturing apparatus according to claim 3, wherein the ceiling and lateral walls of the process chamber along which a gas supplied from the gas

inlets flows have flat surfaces.

15. (Previously Presented) The manufacturing apparatus according to claim 4, wherein the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows have flat surfaces.

4

- 16. (Previously Presented) The manufacturing apparatus according to claim 5, wherein the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows have flat surfaces.
- 17. (Previously Presented) The manufacturing apparatus according to claim 6, wherein the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows have flat surfaces.
- 18. (Cancelled.)
- 19. (New) A method of manufacturing a porous glass base material, said method comprising:

preparing a process chamber having a ceiling, a first lateral wall, and a second lateral wall that opposes the first lateral wall, at least one gas inlet being provided both in an upper portion of the first lateral wall and along the ceiling, and at least one gas inlet being provided both in an upper portion of the second lateral wall and along the ceiling;

placing a starting member vertically between the first and second lateral walls; depositing glass particles, produced by subjecting a material gas to flame hydrolysis using a burner, onto the starting member;

intaking a gas via the gas inlets; and

flowing the intaking gas across the ceiling of the process chamber.

20. (New) The manufacturing method according to claim 19, further comprising supplying glass particles at a rate of 700 g/hr during said depositing glass particles.

Serial No. 10/594,529 Docket No. SH-0069PCTUS RYU.034

5

- 21. (New) The manufacturing method according to claim 19, wherein said flowing the intaking gas comprises forming a gas flow layer along the ceiling and the lateral walls of the process chamber at a linear speed of 1.5 m/sec during said depositing glass particles.
- 22. (New) The manufacturing method according to claim 19, wherein said depositing is performed for 30 hours.
- 23. (New) The manufacturing method according to claim 19, further comprising flowing the intaking gas in the first lateral wall opposite to a direction that the intaking gas flows in the second lateral wall.
- 24. (New) The manufacturing apparatus according to claim 2, wherein an intaking gas flows in the first lateral wall opposite to a direction that the intaking gas flows in the second lateral wall.